

Serial No. 10/520,237
Atty. Doc. No. 2002P02127WOUS01

RECEIVED
CENTRAL FAX CENTER
JUL 20 2006

Amendments To The Claims:

Please amend the claims as shown.

1 – 11 (canceled)

12. (currently amended) An oxidation resistant component, comprising:

a substrate; and

a protective layer, comprising:

an intermediate MCrAlY layer on the substrate having a composition (in wt%)

10% – 50% Co, 10% – 40% Cr, 6% – 15% Al, 0.02% - 0.5% Y, and a Ni base; and

an outer layer which has a phase γ -Ni structure and has the composition (in wt%):

15% - 40% Cr, 5% - 80% Co, 3% - 6.5% Al and a Ni balance base and consists of pure γ -Ni phase wherein the outer layer is arranged on the intermediate MCrAlY layer, and M is an element selected from the group consisting of Co, Fe, and Ni and

a layer of metastable aluminium oxide formed on top of the outer layer.

13. (previously presented) The component according to claim 12 wherein the intermediate layer is located near the substrate.

14 (previously presented) The component according to claim 12, wherein the protective layer consists of two separated layers.

15. (previously presented) The component according to claim 12, wherein a continuously graded concentration of the composition of the intermediate and outer layer is located inside the protective layer.

16. (previously presented) The component according to claim 12, wherein the outer layer is thinner than the intermediate layer on or near the substrate.

Serial No. 10/520,237
Atty. Doc. No. 2002P02127WOUS01

17. (previously presented) The component according to claim 12, wherein the intermediate MCrAlY-layer or the outer layer contains a further element selected from the group consisting of (in wt%): 0.1% - 2% Si, 0.2% - 8% Ta, and 0.2% - 5% Re.

18. (previously presented) The component according to claim 12, wherein the outer layer further comprises an element from the group consisting of Hf, Zr, La, Ce, and other elements of the Lanthanide group.

19. (canceled)

20. (previously presented) The component according to claim 12, wherein the outer layer has the composition (in wt%): 20% - 30% Cr, 10% - 30% Co, and 5% - 6% Al.

21. (canceled)

22. (currently amended) The component according to claim 12, wherein the MCrAlY layer contains at least one element from the group consisting of Ti (Titanium) and Sc (Scandium).

23. (previously presented) The component according to claim 12, wherein a thermal barrier coating is applied to the outer layer.

24. (previously presented) The component according to claim 17, wherein the rhenium content is between 0.2% and 2wt%.

25. (previously presented) The component according to claim 23, wherein a heat treatment prior to applying a thermal barrier coating is carried out in an atmosphere with a low oxygen partial pressure in the range of 10^{-7} to 10^{-15} bar.

Serial No. 10/520,237

Atty. Doc. No. 2002P02127WOUS01

26. (previously presented) The component according to claim 12, wherein the component is a turbine component with application in a gas turbine.

27. (currently amended) An oxidation resistant turbine component for use in a gas turbine, comprising:

a substrate; and

a protective layer, comprising:

an intermediate MCrAlY layer on the substrate having a composition (in wt%) 10% - 50% Co, 10% - 40% Cr, 6% - 15% Al, 0.02% - 0.5 Y, and a Ni base; and

an outer layer which has a phase γ -Ni structure and has the composition (in wt%): 15% - 40% Cr, 5% - 80% Co, 3% - 6.5% Al and a balance base and consists of pure γ -Ni phase wherein the outer layer is arranged on the intermediate MCrAlY layer and M is an element selected from the group consisting of Co, Fe, and Ni.

28. (previously presented) The component according to claim 27, wherein the intermediate MCrAlY-layer or the outer layer contains a further element selected from the group consisting of (in wt%): 0.1% - 2% Si, 0.2% - 8% Ta, and 0.2% - 5% Re.

29. (previously presented) The component according to claim 27, wherein the outer layer further comprises an element from the group consisting of Hf, Zr, La, Ce, and other elements of the Lanthanide group.

30. (previously presented) The component according to claim 27, wherein the outer layer has the composition (in wt%): 20% - 30% Cr, 10% - 30% Co, and 5% - 6% Al.